Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

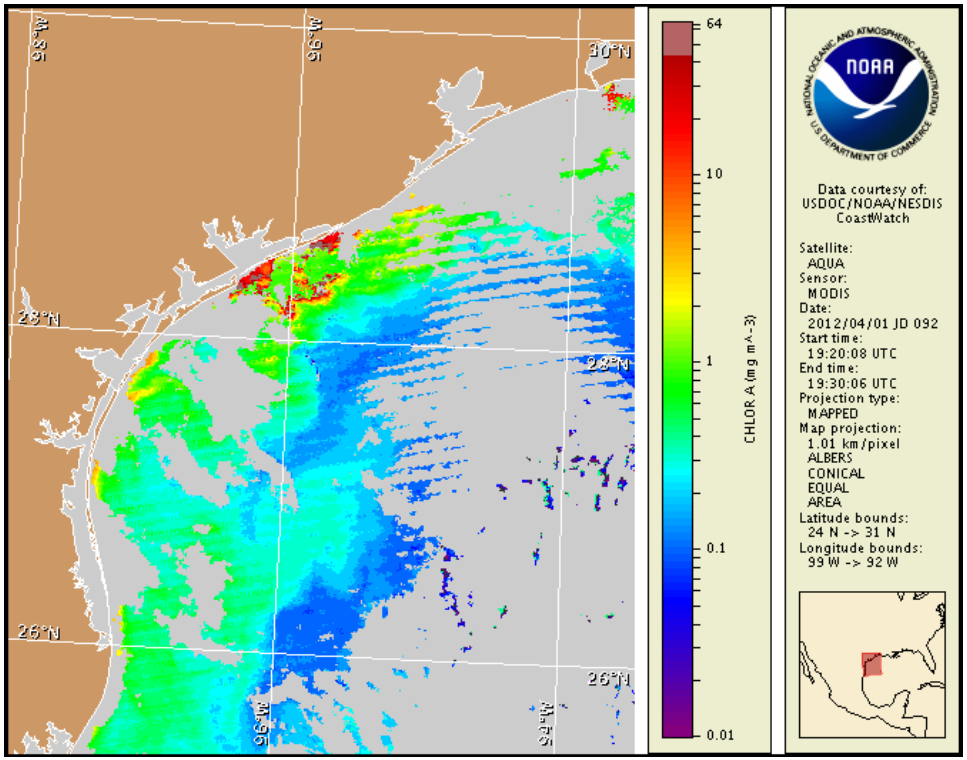
Monday, 02 April 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 26, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 24 to 29 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive: http://tidesandcurrents.noaa.gov/hab/bulletins.html

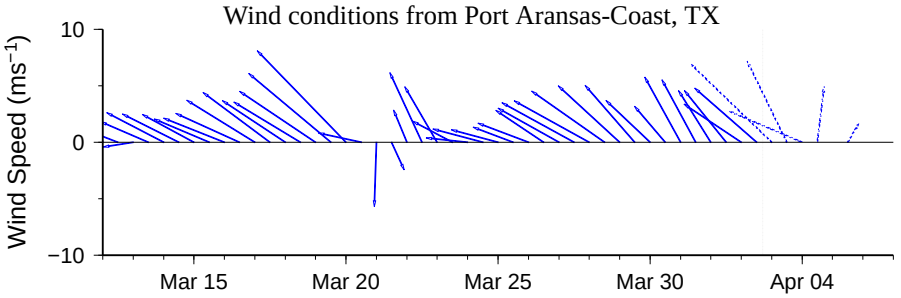
Conditions Report

There is currently no indication of a harmful algal bloom of Karenia brevis (Texas red tide) at the coast in Texas. No impacts are expected alongshore Texas today through Sunday, April 8. There is currently a non-toxic bloom of the algae Aureoumbra lagunensis in the upper Laguna Madre region. This algal bloom does not produce respiratory irritation impacts associated with the Texas red tide caused by Karenia brevis, but it may cause discolored water.

Analysis

There is currently no indication of a harmful algal bloom of *Karenia brevis* at the coast in Texas. No new reports of *Dinophysis* have been received since very low concentrations were identified in Port Aransas over three weeks ago (TAMU). Further *Dinophysis* updates will be included in this analysis as new reports are received. Recent MODIS imagery (4/1; shown left), is partially obscured by clouds from Sabine Pass to the South Padre Island region. Patches of elevated to very high chlorophyll (4 to >20 μg/L) are visible stretching along- and offshore the Matagorda Bay area. Patches of elevated chlorophyll (2-6 μg/L) are also visible alongshore the Port Aransas and Padre Island National Seashore regions. Elevated chlorophyll is not indicative of the presence of *K. brevis*; it is most likely an artifact of clouds in the imagery and the resuspension of benthic chlorophyll and sediments along the coast. Forecast models based on predicted near-surface currents indicate a potential maximum transport of 20km south from the Port Aransas region from April 1 to 4.

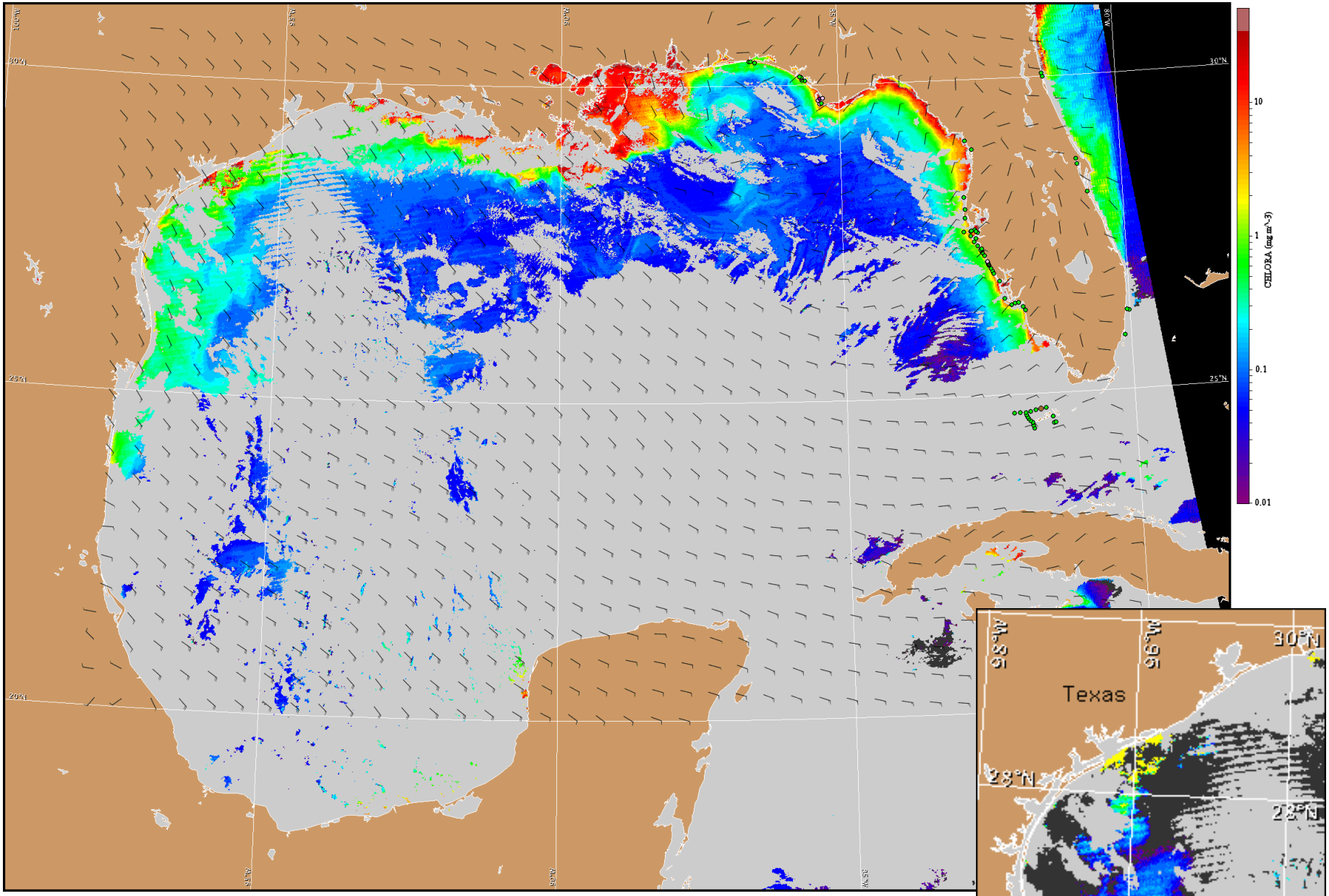
Kavanaugh, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Port Aransas: Southeast winds (5-20kn, 3-10 m/s) this afternoon through Wednesday. East winds (5 kn, 3 m/s) Wednesday afternoon becoming southeast winds (5-15 kn, 3-8 m/s) Wednesday night through Friday.



Satellite chlorophyll image and forecast winds for April 3, 2012 12Z with cell concentration sampling data from March 24 to 29 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:
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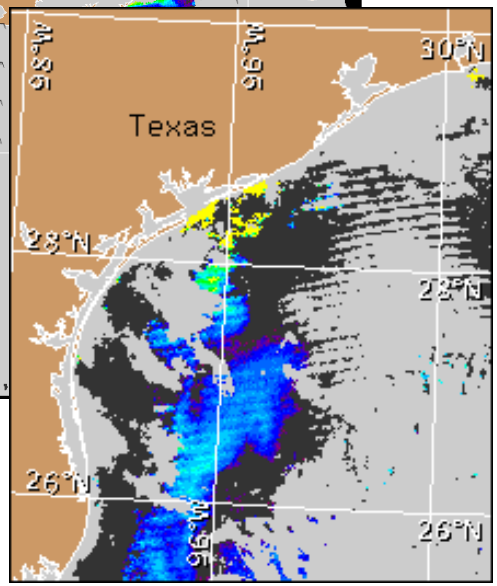

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).